

ARMALITE

AR-18 (AR-180)

OPERATION & MAINTENANCE MANUAL

- * General Data
- * Accessories
- * Special Tools
- * Operation--Usual & Unusual Conditions
- * Telescopic Sight
- * Repair
- * Cleaning
- * Preventative Maintenance
- * Trouble Shooting
- * Disassembly/Assembly
- * Replacement of Parts

Armalite, Inc.
118 East 16th Street
Costa Mesa, California

OPERATING AND MAINTENANCE MANUAL

RIFLE, 5.56 - MM, AR - 18

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Rifle 5.56 mm — AR-18
Figure 1-1



Rifle 5.56 mm - AR-18 Stock Folded
Figure 1-2

CHAPTER I

INTRODUCTION

Section 1

1-1. GENERAL.

1-2. SCOPE. This manual is published for the information and guidance of personnel responsible for operation and organizational maintenance of the Rifle, 5.56 MM, AR-18. Information provided includes: tabulated data, accessories and special tools, preparation for use, operating instructions, preventive maintenance and lubrication procedures, inspection, trouble-shooting, repair parts, procedures on disassembly, cleaning, repair, assembly and ammunition.

Section 2

1-3. DESCRIPTION AND DATA.

1-4. DESCRIPTION. The AR-18 rifle, (Figure 1-1), is light-weight, air-cooled, gas-operated, magazine-fed, shoulder or hip fired, and designed for either full automatic or semi-automatic fire. The rifle utilizes a 20-round magazine.

1-5. The manufacturer's name, serial number and caliber is stamped on the left side of the upper receiver.

1-6. The barrel is air-cooled and is provided with a flash suppressor and recoil compensator, which serves as a grenade launcher and front support for the bayonet. The barrel is surrounded by a heat resisting fiberglass material, which serves as a hand guard and forearm. The hand guard has a heat resisting metal inner shield. The front sight is adjustable for elevation and the rear sight for windage.

1-7. The rifle has a folding buttstock. (Figure 1-2). The buttstock is made of a durable, synthetic material of high impact strength unaffected by exposure.

1-8. The rifle is readily opened by pressing the guide spring plate forward, providing ready access for removal of the bolt carrier assembly and upper hand guard. Also accessibility to all other working parts for convenient cleaning and inspection. If ever required, the manual charging handle provides a means of forcing the bolt forward to full lock position.

1-9. The bolt incorporates seven locking lugs. Upon closing, the bolt rotates to engage seven similar locking lugs in the barrel extension. Thus, the full force of the explosion of the cartridge is absorbed by the barrel extension and bolt. No pressure is exerted upon the receiver. The receiver is made of light-weight steel stampings. The design contributes to a high degree of safety, durability and performance of the rifle. Portability and logistical value is greatly increased due to resultant weight saving.

Section 3

1-10. TABULATED DATA.

1-11. Tabulated data pertaining to the general characteristics and performance are listed as follows:

Weight

AR-18 Rifle without magazine and sling	.6 lb.
Sling M1	.4 lb.
Empty Aluminum magazine	.2 lb.
Loaded Aluminum magazine	.7 lb.
AR-18 Rifle with sling and loaded magazine	.74 lb.
Bipod M-3	.6 lb.
Bipod Case	.2 lb.
Bayonet-Knife M7	.6 lb.
Scabbard M8A1	.8 lb.

Length

Rifle with flash suppressor-compensator.....	38 in.
Rifle with bayonet-knife.....	43.5 in.
Barrel	18 in.
Barrel with flash suppressor.....	19.8 in.

Mechanical Features

Rifling, R.H. 6 grooves — 1 turn in 12"	
Bore Maximum.....	.2190
Groove Maximum.....	.2285
Sight Radius.....	19.6 in.
Trigger pull	
Maximum	8.5 lbs.
Minimum	5.0 lbs.
Method of Operation.....	Gas
Type of Mechanism.....	Rotating Bolt
Method of Feeding — Magazine.....	20 rds.
Cooling	Air

Ammunition

Caliber	5.56-mm
Type	Ball, Tracer & Grenade Launching (Blank)

Firing Characteristics

Muzzle Velocity (Average).....	3250 fps
Muzzle Energy.....	1300 ft-lb.
Chamber Pressure.....	52,000 psi
Cyclic Rate of Fire.....	.700/800 rds. per minute
Maximum Rate of Fire	
Semiautomatic	45/65 rds. per minute
Automatic150/200 rds. per minute
Sustained Rate of Fire.....	12/15 rds. per minute
Maximum Range.....	2653 meters
Maximum Effective Range.....	460 meters

Table 1-1. ACCESSORIES

Item	Identifying Number	Figure Number
Bayonet-Knife AR-18	2862	1-3
Bipod, Rifle AR-18	2773.5	1-3
Case, Bipod	2864	1-3
Scabbard, Bayonet-Knife AR-18	2863	1-3

Table 1-2. SPECIAL TOOLS

Item	Identifying Number	Figure Number
Rod, cleaning, small arms, AR-18	2866	1-3
Brush, cleaning, small arms	2867	1-2

Section 4

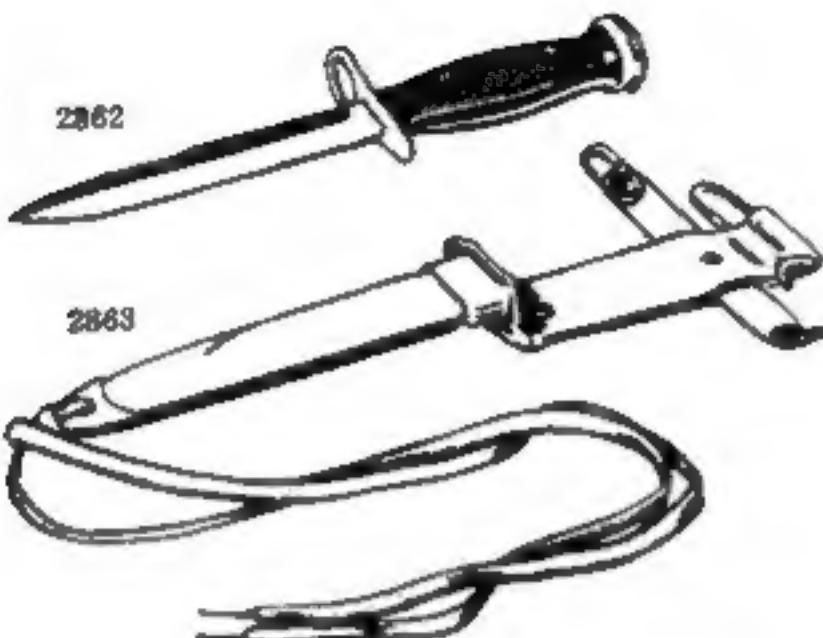
1-12. ACCESSORIES AND SPECIAL TOOLS.

1-13. ACCESSORIES.

1-14. Accessories are tabulated in Table 1-1 and listed in Appendix I, which is the authority for requisitioning replacements.

1-15. Special Tools.

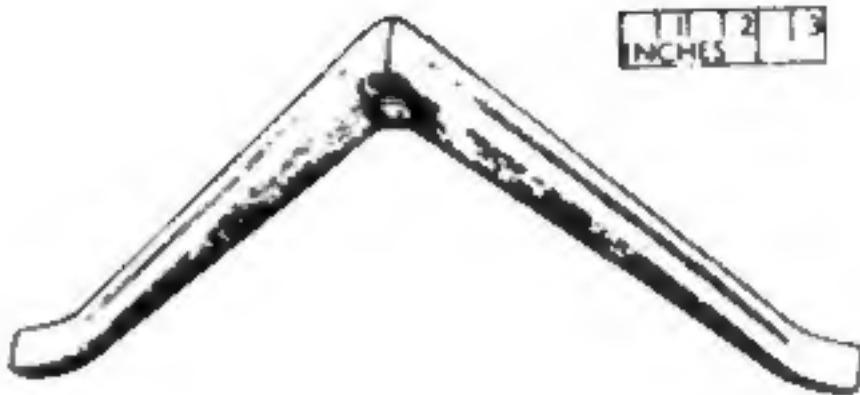
1-16. Special Tools are tabulated in Table 1-2 and listed in Appendix I, which is the authority for requisitioning replacements.



2862

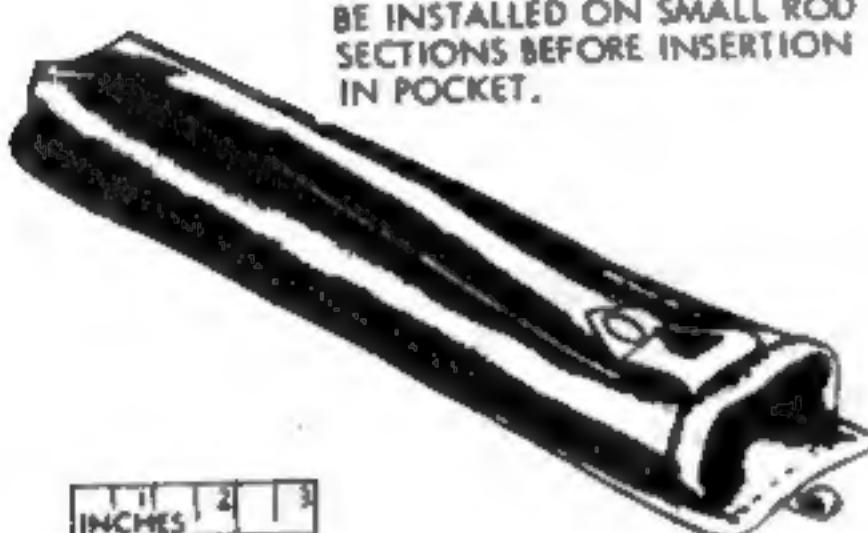
2863

Bayonet-Knife AR-18 and Bayonet-Scabbard, Bayonet-Knife AR-18



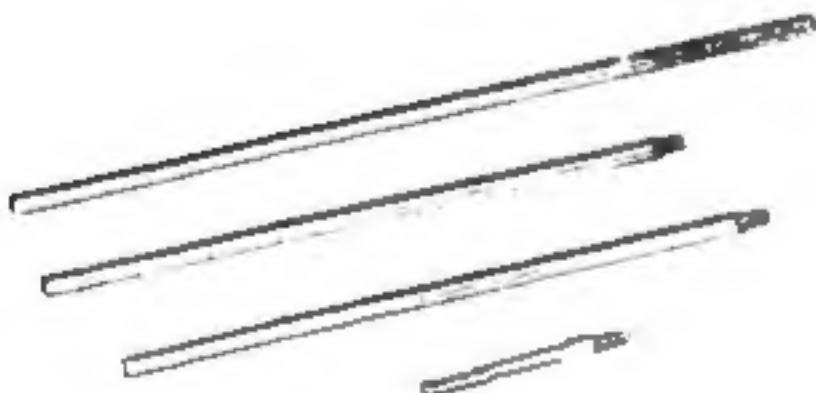
1 1 2 3
INCHES

Rifle Bipod, AR-18 2773-5



1 1 2 3
INCHES

Bipod Case - 2864



1 1 2
INCHES

Small Arms Cleaning Rod - 2866



1 1 1 1 1 2
INCHES

Small Arms Cleaning Brush - 2867

CHAPTER II OPERATING INSTRUCTIONS

Section 1

2-1. SERVICE UPON RECEIPT OF MATERIAL.

2-2. GENERAL.

2-3. Upon receipt of the rifle, it will be inspected by the responsible individual to determine that it has not been damaged in-transit and is in proper condition for service.

2-4. All basic issue items, replacement parts, tools, and equipment checked as invoiced.

2-5. A record will be made of all missing parts, tools, and equipment and any other deficiencies in the shipment. Corrective action will be initiated by the responsible individual.

2-6. SERVICES.

2-7. The rifle will be unpacked, all foreign matter removed from the surfaces of the weapon, assuring all components are clean. If necessary, the bore will be wiped clean by pushing clean, dry patches through the barrel, from the chamber to the muzzle.

2-8. The rifle will be visually inspected for function to include proper seating of the magazine.

2-9. BIPOD.

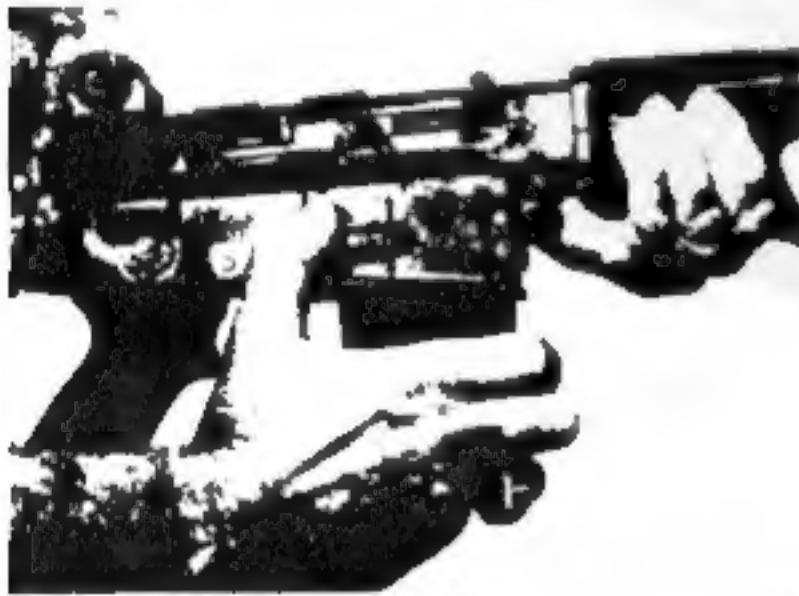
2-10. Foreign matter will be removed from the bipod and case, as necessary.

2-11. The bipod will be attached to the rifle to assure that the bipod is undamaged, suitable for use.

Section 2

2-12. CONTROLS.

2-13. Refer to (Figure 2-1) for Controls and Operation of Controls.



Remove Magazine



Figure 2-1

Clearing Rifle, Inspect Chamber



Place Selector Lever in Safe Position

Section 3

2-14 OPERATION UNDER USUAL CONDITIONS

2-15 GENERAL

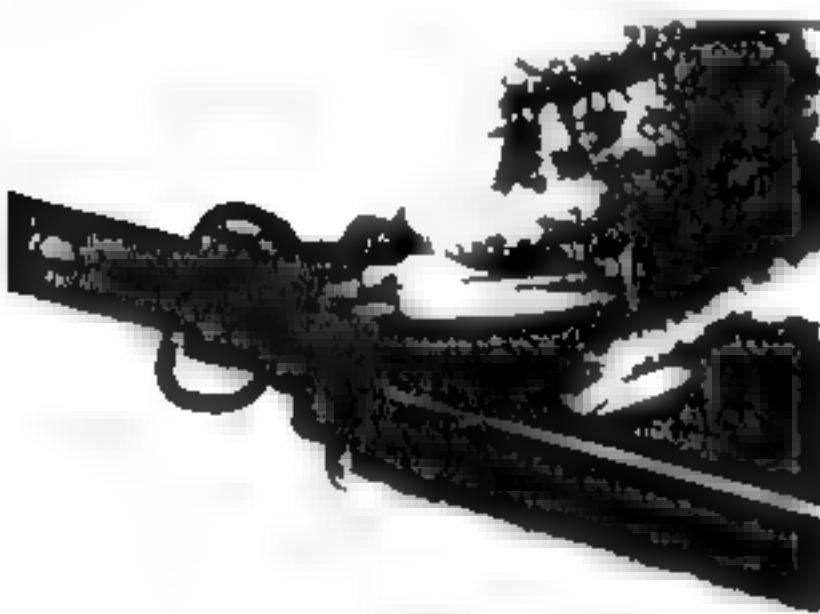
2-16 PREPARATION FOR FIRING Clear the rifle by performing the following operations Remove magazine, inspect chamber and place selector lever on "safe" position (Fig. 2-1)

2-17 SERVICE BEFORE FIRING Refer to Tables 3-2 and 3-3

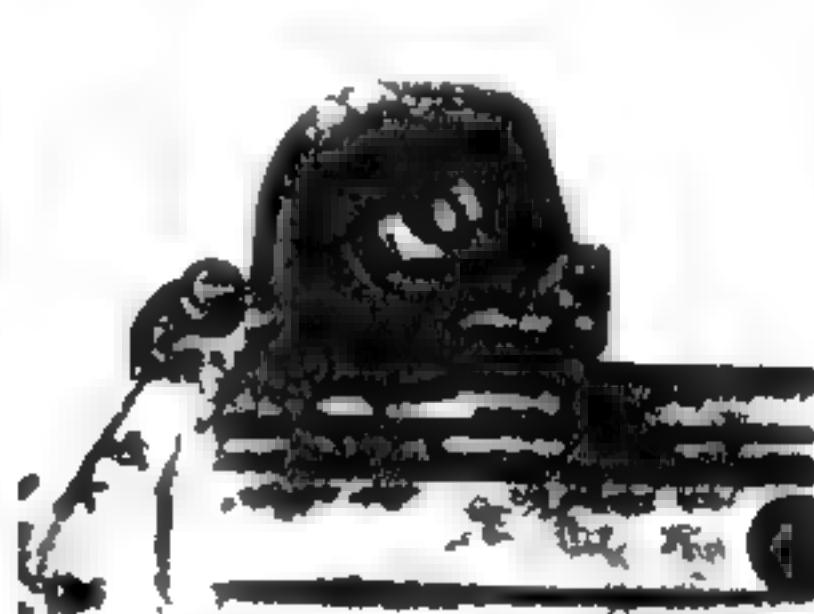
2-18 CLEAN AND LUBRICATE THE BOLT CARRIER GRO1 P The bolt carrier group may be removed as shown in (Figure 3-10) Remove any oil or dirt from the external surfaces of the bolt and bolt carrier with a clean, dry rag or cleaning patches Place a drop of oil in each of the two holes of the bolt carrier to lubricate the guide rods and a drop on the body of the bolt Use oil sparingly, as excess oil may collect fore gr. matter Wipe any excess oil from the surface of the bolt carrier A light film of grease or oil may be applied to the guide rail for the bolt carrier on the left inside of the upper receiver

2-19 LOADING Note: Repeat Operation in (Figure 2-1) (Safety Procedure)

2-20 LOADING THE MAGAZINE The magazine has a capacity of 20 rounds and may be loaded with any amount up to that capacity The magazine follower has a raised portion generally resembling the outline of a cartridge Cartridges are loaded into the magazine so that the tips of the bullets point in the same direction as the raised portion of the follower



Front Sight Adjustment
Figure 2-2

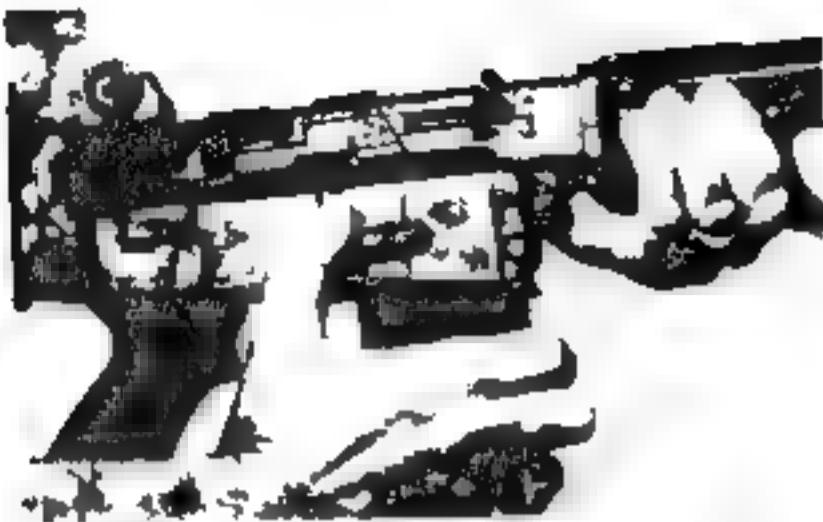


Rear Sight Adjustment
Figure 2-3

2-21 LOADING THE RIFLE The magazine may be inserted with the bolt and the bolt carrier open or closed Hold the forearm of the rifle with the left hand, pointing the muzzle in a safe direction With the right hand, insert a loaded magazine into the magazine housing Push upwards until the magazine gauge engages and holds the magazine Rap base of magazine sharply with heel of hand to assure positive retention Check by attempting to withdraw the magazine without use of the magazine release If the action is open, grasp the charging handle with the right hand, pull to the rear, thus disengaging the bolt stop and release the charging handle A round will be stripped from the magazine and loaded into the chamber If the action is closed when the magazine is inserted, pull the charging handle fully to the rear with the right hand and release it NOTE Do not "ride" the charging handle forward If the charging handle is eased forward from the open position, the bolt may fail to rotate and fully lock If the bolt fails to go all the way forward, push forward on the manual charging handle The rifle is now loaded, ready to fire

WARNING

Make sure the selector lever is on the "safe" position, if not ready to fire



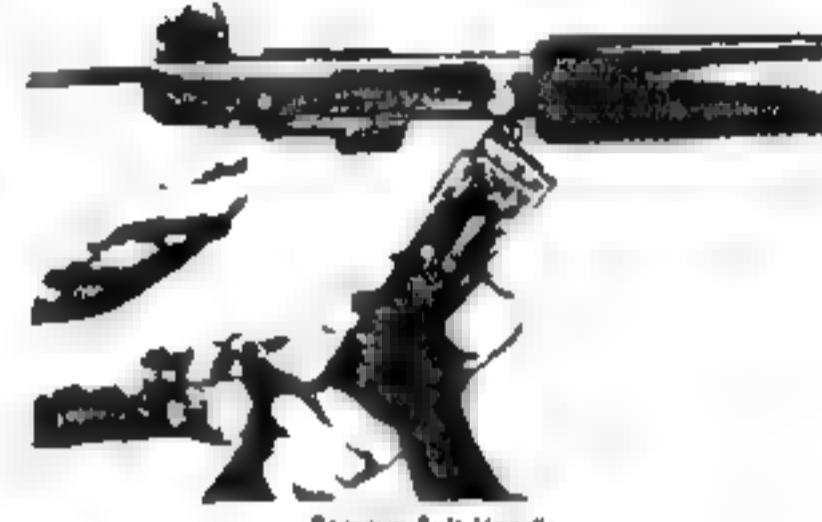
Remove Magazine



Remove Bolt Handle



Disengage Takedown



Remove Bolt Handle

2.22 FIRING

2.23 SELECTOR LEVER The rifle may be fired semi-automatically or fully automatically by moving the selector lever to the appropriate position, described in Figures 2-1 and 2-5

2.24 SEMI POSITION With the selector lever in this position, the rifle will fire one round each time the trigger is pulled

2.25 AUTO POSITION With the selector lever in this position, the rifle will continue to fire until the magazine is empty or the trigger is released. When the rifle is fired on either SEMI or AUTO, the bolt will lock in open position when the last round from a magazine has been fired

2.26 WITH STOCK FOLDED With the stock folded, the rifle may be fired and readily controlled from the hip position. The selector lever must be positioned from the right side of the rifle as the folded stock prevents access to the lever on the left side. See Figure 2-5

2.27 IMMEDIATE ACTION PROCEDURES FOR REMOVING A LIVE ROUND IN CASE OF FAILURE TO FIRE

2.28 To apply immediate action, follow the sequence below

a. Wait 10 seconds, then pull charging handle fully to the rear. Observe for ejection of cartridge or cartridge case

1. If a cartridge is ejected, release charging handle to feed a new round
2. If a cartridge or case is not ejected, a failure to extract or feed has occurred. Check for round in chamber. If chamber is empty, change magazines, reload and attempt to fire the rifle.

b. If a 1 above occurs, it may indicate a defective round, a broken firing pin, hammer spring or a bolt closure failure

- c. If a 2 above occurs, it may indicate a broken extractor

2.29 MISFIRE, HANG FIRE AND COOK-OFF In the event of failure of the rifle to fire when the trigger has been pulled and the hammer has fallen, allow ten seconds to elapse in the event of a hang fire and then eject the round and attempt to fire. Cook-off can only result from an excessively heated chamber, caused by full automatic fire requiring approximately 180-200



Figure 2-4 Remove Bolt Assembly Guide Rods and Springs



Figure 2-5 Selector Lever Operation with Stock Folded

rounds fired in a very minimum period of time. A cook-off can result when the primer is exposed to extremely high temperature, but still will require approximately 30 seconds for the heat to ignite the primer. In the event a cook-off occurs, immediately remove the magazine and eject the chambered cartridge. Under all above conditions, be particularly careful as to the direction the rifle is pointed.

2-30 DOUBLE FEED Double feed may occur when initially loading the rifle, caused by failure to allow the first round to fully chamber and pulling the charging handle to the rear with the first cartridge still held by the extractor. The bolt carrier, going forward, will attempt to strip the second round from the magazine, resulting in a jammed condition. Remove the magazine and pull the charging handle to the rear, releasing the first cartridge.

2-31 UNLOADING. Repeat operation in figure 2-1 and 2-16.

2-32 INSTALLING ACCESSORIES, figures 2-8 and 2-9.



Rifle 5.56 mm, M16 Stock folded in
Jump Position
Figure 2-6A



Rifle 5.56 mm, M16 Stock Extended in
Jump Position
Figure 2-6B

Section 4

2-33. OPERATION UNDER UNUSUAL CONDITIONS. If it is desired to fire the rifle with the stock folded, the user should become fully familiar with the operation of the selector lever from the right side of the rifle. The forefinger of the right hand should be used to allow the continued proper hold on the pistol grip (a left handed shooter would use the thumb of the left hand).

2-34. The rifle may be attached to the user for jump purposes, with stock folded or fully extended. See Figure 2-6.

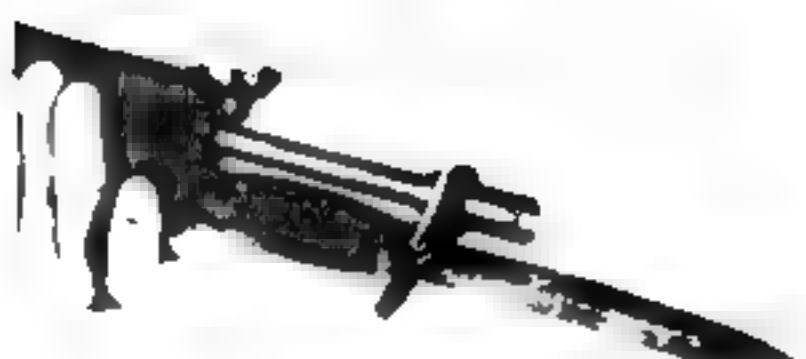
2-35. The rifle should be held when launching grenades from a hip position, muzzle elevated, utilizing the sling. See Figure 2-7.

NOTE

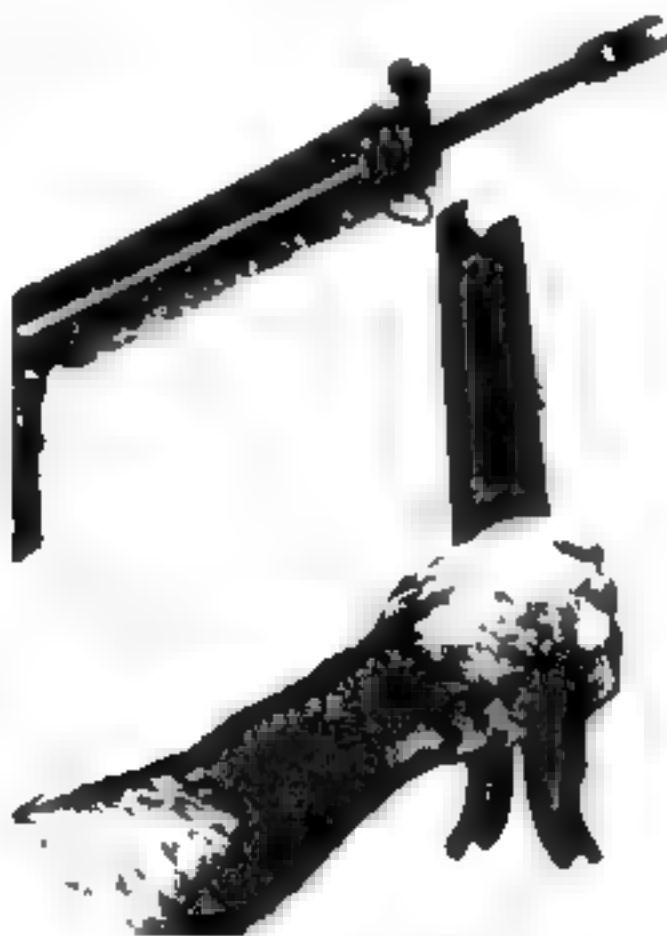
The rifle should never be fired from the shoulder when launching a grenade.



Launching Grenade
Figure 2-7



Remove into Bayonet Knife
Figure 2-8



Remove into Bipod
Figure 2-9

Section 5

2-36. TELESCOPIC SIGHT. Fig. No. 2-10. The telescopic sight is one of extremely durable design with outstanding optical capabilities. It has a true 2.75X magnification.

2-37. The quick detachable mount allows immediate removal or installation. Regardless of the number of times removed, it will return to a positive zero due to the dove tail design of the base and mount. A tunnel over the sight allows use of the iron sight in case of such an immediate requirement.

2-38. A range knob on top of the sight has 4 settings - 1 for 1-200 yards, 1 each for 300, 400 and 500 yards. This rapid and positive elevation system contributes greatly to practical use in the field. The protective cap on the top of the range adjustment knob is removed by the use of the head of a cartridge. Sight elevation adjustments are made under this cap by rotating the elevation knob with the head of a cartridge in the direction of the arrow to move the point of impact up.

2-39. Dust covers are provided and they should be used at all times when the sight is not installed on the rifle or intended for immediate use to protect the lens.

2-40. INSTALLATION. The sight is installed by compressing the safety lever on the front of the mount allowing it to clear the dove tail base on the rifle. The plunger at the rear of the mount is pressed firmly against the front base of the rear sight, compressing the spring allowing the scope mount to slide forward on the base.

2-41. The sight incorporates an inverted post as well as fine crosshairs. When "holding over" at extreme ranges, this precludes the post from blotting out the target. This comparatively heavy post allows positive point of aim in times of near darkness when the fine cross hairs tend to disappear against the background.

2-42. MAINTENANCE

1. Use lens cover at all times when the sight is not in use on the rifle
2. Check periodically to assure all caps and screws are snug and in place
3. Oil the spring plungers lightly.
4. Oil the base occasionally to facilitate mounting and to prevent rusting.

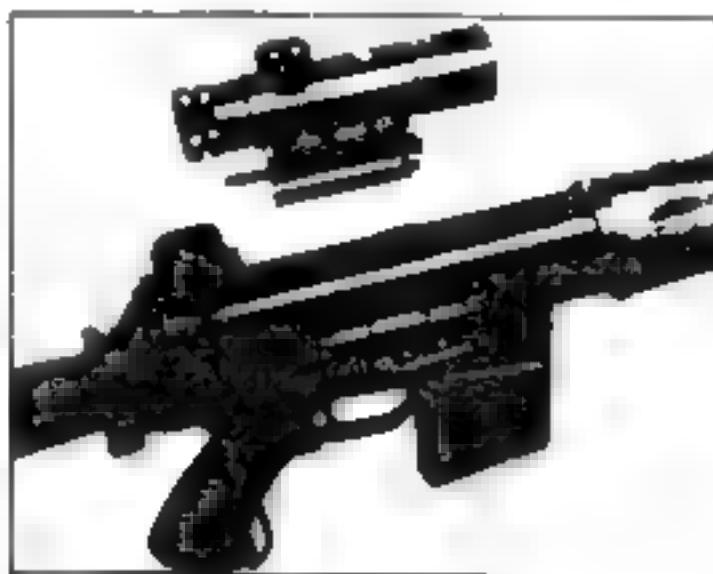


Figure 2-10

CHAPTER III ORGANIZATIONAL MAINTENANCE INSTRUCTIONS

3-1 REPAIR PARTS, TOOLS AND EQUIPMENT.

3-2 GENERAL.

3-3 This chapter lists repair parts, common tools and equipment and special tools and equipment.

3-4 REPAIR PARTS (2nd Echelon)

PART NO.	DESCRIPTION	QUANTITY
2666-A	Extractor	29
2671-C	Firing Pin	3
2673-B	Take Down Pin, Bolt	3
2668-A	Spring, Extractor	29
2715-C	Spring, Firing Pin	3
2678-A	Spring, Operating Rod	2

3-5 ACCESSORIES AND SPECIAL TOOLS. Accessories and Special Tools are tabulated in Table 3-4.

3-6 LUBRICATION

3-7. GENERAL. The rifle should be cleaned and lubricated at the end of each day's use, or when exposed to an excessive amount of dirt, grit, or other foreign matter and, or water. The rifle should not generally be fired beyond 200 rounds without being cleaned, although, under normal condition, the rifle can be expected to perform reliably up to approximately 1,000 rounds without cleaning. For best continued operation, all surfaces should be protected by a very light film of oil, except under sub-zero temperatures all oil should be removed from moving components. The rifle can function completely dry, although lack of lubricant is undesirable, due to resultant excessive wear. NOTE: Keep the gas piston clear of excess oil to prevent early formation of carbon.

3-8. CLEANING AND LUBRICATION AFTER FIRING.

3-9. CLEANING AND LUBRICATING THE BARREL.

a. Attach the wire brush to the cleaning rod, dip in solvent cleaning compound and brush the bore thoroughly. Do not submerge barrel in cleaning solution. The gas piston should not be allowed to fill with oil. Brush the bore from chamber to muzzle, using straight-through strokes.

NOTE

Do not reverse direction of brush while in bore.

Push the brush through the bore until it extends beyond the muzzle. Continue until the bore is well covered with solvent. Remove the brush from the rod, and dry the bore by pushing through clean, dry patches. Continue until patches come out clean and dry.

b. Clean the locking lugs in the barrel extension, just to the rear of the chamber. Brush the lugs with a small brush.

c. After cleaning, lubricate the bore with a lightly oiled patch to prevent corrosion and pitting. Lightly oil the lugs in the barrel extension.

d. Remove the individual component parts of the operating rod. Wipe clean with oil-soaked patches. Use the cleaning rod with the brush to clean the gas piston. Remove any excess oil. See Figure 2-6.

3-10. CLEANING AND LUBRICATING THE BOLT CARRIER GROUP.

a. Remove the bolt carrier group from the upper receiver. Field strip the bolt carrier group. Wash all external surfaces with a patch saturated in solvent cleaning compound.

b. Using a small brush dipped in solvent cleaning compound, scrub all carbon deposits and dirt from the locking lugs of the bolt.

CAUTION

Brush the face of the bolt, paying particular attention to area under the face of extractor. Do not attempt to remove discoloration caused by heat.

When dry, lightly oil the surface of the bolt carrier and place one drop on the bolt body. See figure 3-20.

3-11. CLEANING AND LUBRICATING THE LOWER RECEIVER GROUP.

- a. Wipe any particles of dirt from the trigger mechanism with a clean patch or brush.
- b. Place a drop of oil on each of the pins and the stock hinge and release plungers.

Section 3

3-12. PREVENTIVE MAINTENANCE SERVICES.

3-13. GENERAL.

3-14. RESPONSIBILITY. It is the responsibility of the operator to assure his rifle is properly lubricated at all times and is in proper functioning order. If the rifle appears to not be functioning normally, it will be reported to the responsible organizational personnel. (Table 3-1). It will be the responsibility of organizational maintenance personnel to make minor repairs, as indicated in Table 3-3.

3-15. GENERAL.

3-16. GENERAL PROCEDURES. Organizational maintenance personnel will be responsible for the care and preventive maintenance of the rifle when in temporary storage and/or undergoing routine inspection. These personnel are responsible for assurance that the rifle is being properly maintained by the operator and only re-issued when in proper mechanical condition. Evidence of component failure or wear will be reported to higher authority, consistent with standard operating instructions.

Section 4

3-14. TROUBLESHOOTING.

3-15. SCOPE. The following information is to assist the operator and organizational maintenance personnel to restore inoperative or worn, or damaged equipment to a satisfactory operating condition. This includes both determination of the cause (trouble shooting) and corrective action. All repair maintenance indicated shall be performed only by qualified personnel utilizing standard service equipment. Table 3-1.

Table 3-1. TROUBLE SHOOTING

Malfunction	Probable Cause	Remedy
Bolt fails to lock to the rear after last round.	1. Faulty magazine.	Replace magazine.
Failure to feed	1. Faulty magazine. 2. Binding bolt and bolt carrier in locked position.	Replace magazine. Disassemble and clean (on a new weapon, one or two drops of oil on the guide rods may remedy this trouble). Check firing pin and spring and oil. Clean and lubricate bolt and carrier, higher echelon.
Failure to fire	1. Improper assembly of firing pin. 2. Improperly installed hammer or trigger spring. 3. Obstructed chamber.	Reinstall firing pin and check bolt takedown pin for damage. Also check spring and replace if broken. Disassemble and install properly. Clean.
Fires with selector lever on SAFE.	1. Faulty selector lever.	Higher echelon.
With selector lever on SEMI, fires when trigger is released.	1. Faulty or misaligned trigger pin.	Replace trigger pin.
Bolt seizes, will not rotate.	1. Faulty or misaligned trigger pin. 2. Faulty hammer or trigger. 3. Carbon dirty or barred bolt	Notify higher echelon. Notify higher echelon. Hold rifle in vertical position and strike butt sharply on ground while pushing down on charging handle. Clean as necessary.

Section 5

3-16. MAINTENANCE OF RIFLE.

3-17. DISASSEMBLY/ASSEMBLY. This section contains instruction on disassembly, assembly and maintenance, before and after firing. For disassembly and assembly instructions, see figures 3-1 thru 3-19.



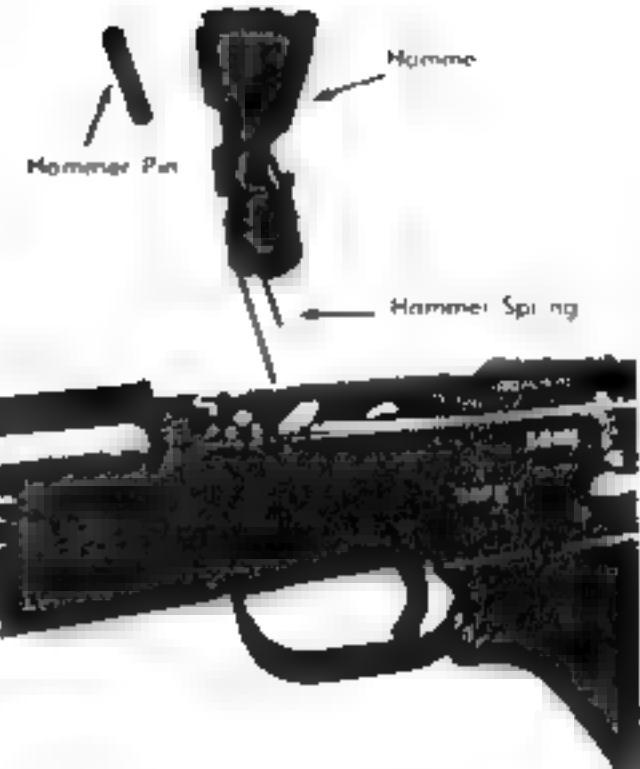
Rifle 5.56 mm. AP. B Model Groups
Figure 1



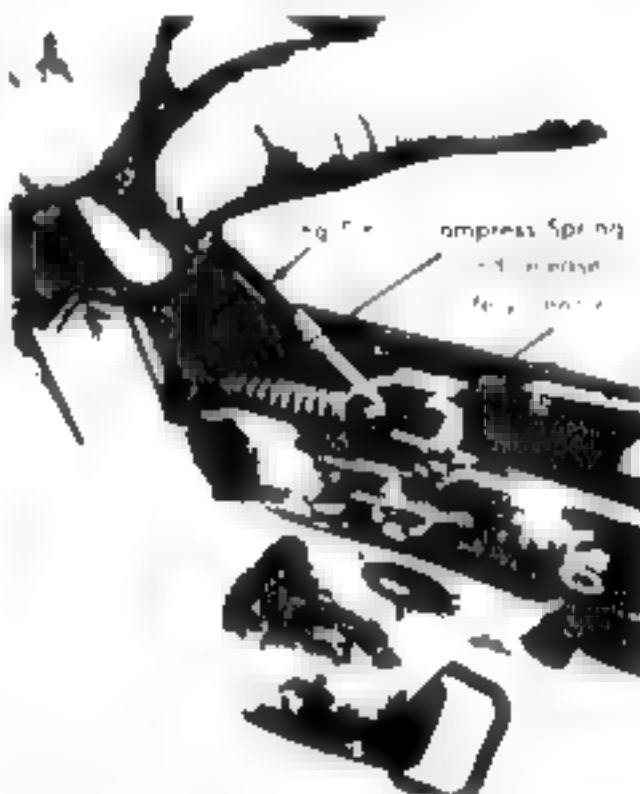
Remove with: Operating Rod Assembly
Figure 3-2



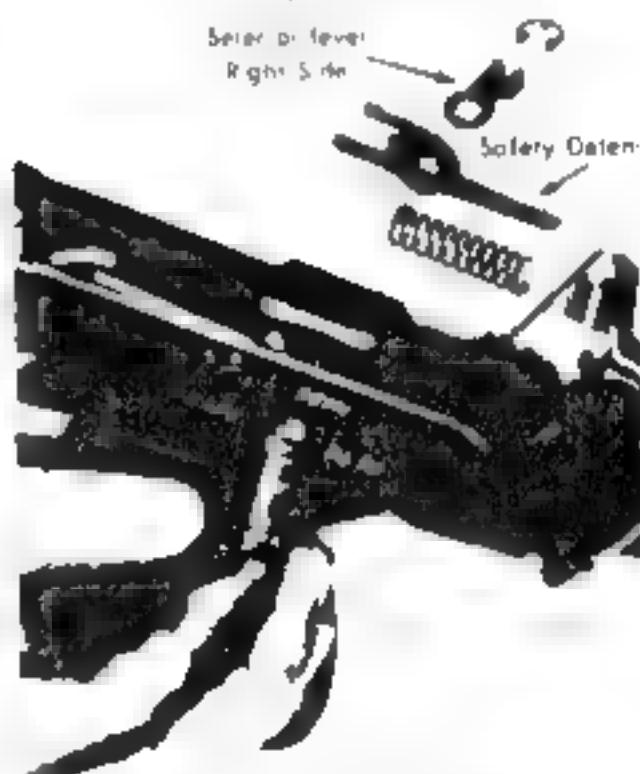
Remove and install Hammer Pin
Figure 3-3



Remove extra Hammer
Figure 4



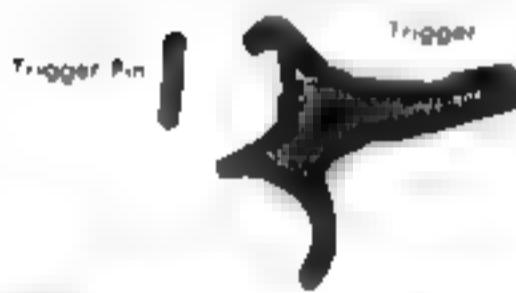
Disengage Remove with: bolt
Figure 4-4



Disengage Remove bolt
Figure 4-5B



Remove/Install Trigger Pin
Figure 3-6



Remove/Install Trigger
Figure 3-7



Disengage Engage Takedown
Figure 3-8



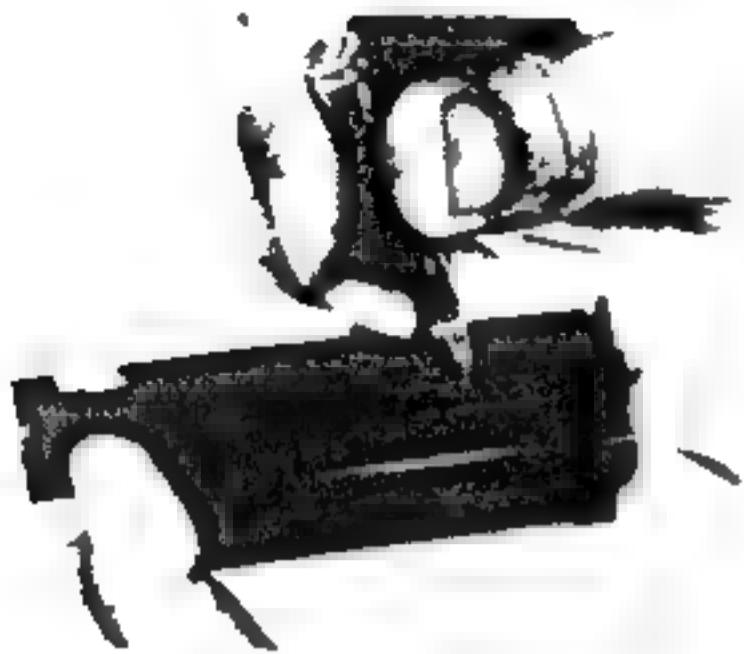
Remove/Install Charging Handle
Figure 3-9



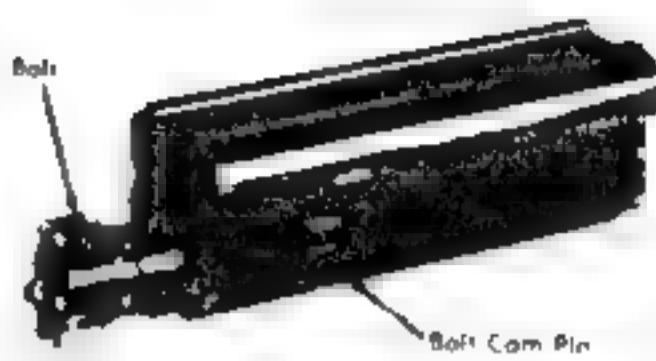
Remove/Install Bolt Carrier, Guide Rods
and Guide Rod Springs
Figure 3-10



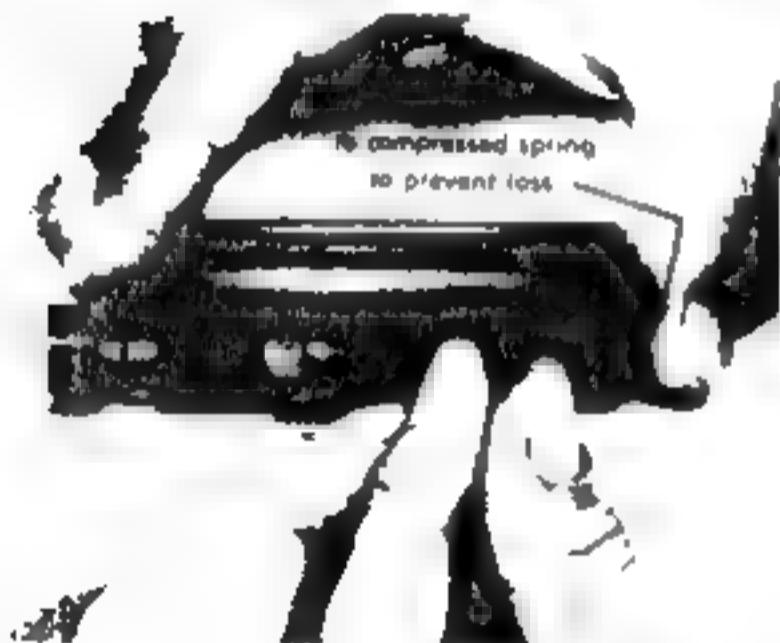
Remove/Install Upper Hand Guard
Figure 3-11



Remove/Install Firing Pin Retaining Pin
Figure 3-12



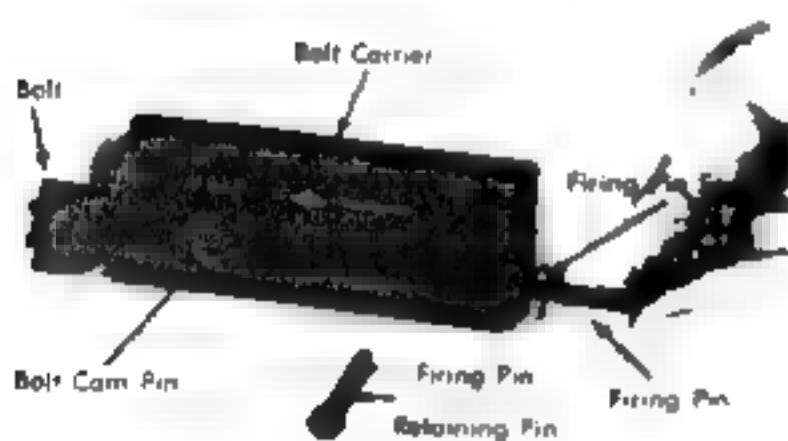
Remove/Install Bolt Cam Pin and Bolt
Figure 3-5



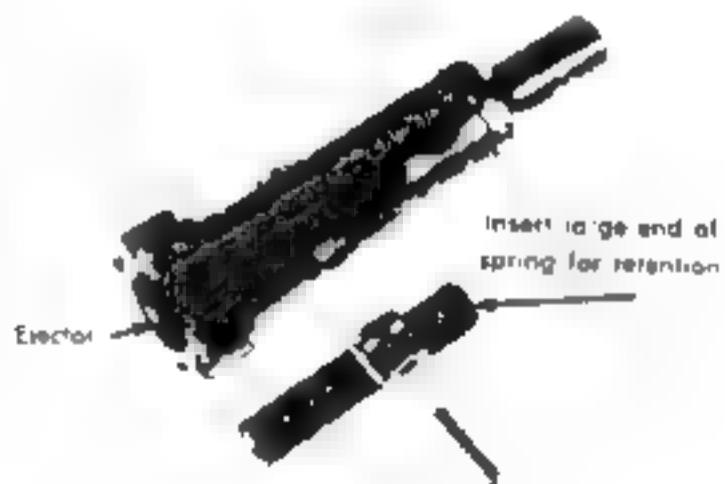
Remove/Install Firing Pin Retaining Pin
Figure 3-3



Remove/Install Extractor
Figure 3-6a



Remove/Install Firing Pin
Figure 3-4



Bolt Assembly
Figure 3-6b

3-18. CLEANING, INSPECTION AND REPAIR.

3-19. BEFORE FIRING. The rifle should be inspected as indicated in Section 3, Chapter II,

2-14.

3-20. AFTER FIRING.

a. Cleaning after Firing: Table 3-2 and 3-3.

b. Inspection after Firing: Table 3-4.

3-21. REPLACEMENT OF PARTS.

3-22. All replacement parts are interchangeable and require no adjustments when being installed in this rifle. However, to insure proper function and full reliability, the following precautions should be taken:

a. Do not interchange bolts, bolt carriers and barrels. Keep the bolt carrier assembly with its original barrel to assure retention of correct headspace.

b. If replacement of either part becomes necessary, carefully check the new part to see that it fits properly and operates smoothly.

3-23. FUNCTION CHECK.

NOTE

Remove Magazine

3-24. A complete function check of the rifle consists of checking the operation of the rifle while the selector lever is in the SAFE, SEMI, and AUTO positions. The following sequence is used for a rapid, complete check. Any portion of the check may be used alone to determine the operational condition of any specific fire selection. Start with the upper and lower receiver groups in the open position.

NOTE

Receiver is in open position

a. **SAFE** position. Cock hammer and pull trigger. Hammer should not fall.

b. **SEMI** position. Pull trigger. The hammer should fall. Hold trigger to rear, recock hammer and release trigger. Hammer should transfer from disconnect to the hammer and rear engagement.

NOTE

Receiver is in closed position

c. **AUTO** position. Pull trigger, hammer should fall. Hold trigger to the rear and operate charging handle, recocking the hammer. Release charging handle. The hammer should fall. Release trigger and operate charging handle, cocking hammer. Release charging handle. Hammer should not fall. For further safety check, while cocked with safety on, rap butt on floor. If hammer falls, turn in for repair.

d. **SEMI** position. Pull the charging handle to the rear. Inspect the chamber for safety and release charging handle. Pull the trigger. Hammer should fall.



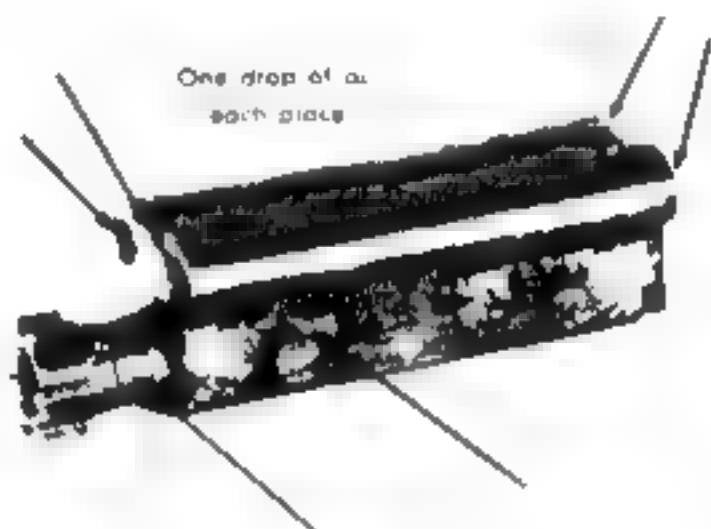
Bolt Carrier Group Parts
Figure 3-17



Disassembled Assembly Magazine
Figure 3-19b



Disengage Engage Receiving Pivot Pin
Figure 3-18



Cleaning and lubricating the Bolt Carrier Group
Figure 3-20



Disassembled Assembly Magazine
Figure 3-19a

Table 3-2.
PREVENTIVE MAINTENANCE SERVICES

Interval & Sequence No.			Operator		Daily Schedule
Before Firing	During Firing	After Firing	Item to be Inspected	Procedures	Paragraph References
1			Barrel Assembly	Wipe oil from bore and chamber.	
2			Bolt Assembly & Barrel	Retract bolt to assure free movement between bolt carrier and receiver.	
3			Rifle	Hand function to assure proper operation.	
4			Lower Receiver & Magazine	Check magazine for positive retention and functioning of bolt catch.	
	5		Barrel, Barrel Extension, Bolt Carrier Assembly	Clean and lubricate. Particular attention to clean bolt carrier and bolt assembly	

Table 3-3.
PREVENTIVE MAINTENANCE SERVICES

Sequence No.	Organizational Maintenance Personnel		Weekly Schedule
	Item to be Inspected	Procedures	
1	Barrel & Bolt Assembly	Inspect for adequate and not excessive lubrication.	
2	Rifle	Hand function to assure proper operation.*	
3	Lower Receiver & Magazine	Check magazine for positive retention & functioning of bolt catch.*	
4	Bolt Assembly	Inspect extractor for cracks. Check extractor spring for proper tension.*	
5	Barrel, Bolt Assembly, Guide Rods, Lower Receiver, Operating Rod	Inspect for cleanliness & lubrication.* *Prior to usage.	

Table 3-4.

INSPECTION

Part, Components or Area	Instructions
Barrel and Barrel Extension	<p>Inspect surfaces for cracks or defects.</p> <p>Check barrel extension for burrs, broken or worn locking lugs.</p> <p>Inspect bore for damage.</p>
Front Sight & Operating Rod.	Check front sight and operating rod for cracks and general condition.
Upper & Lower Receiver Groups.	<p>Inspect the receivers and all parts for cracks.</p> <p>Inspect all parts for wear or damage.</p> <p>Check springs for condition, straightness and tension.</p>
Bolt and Bolt Carrier.	<p>Check for cracks in bolt.</p> <p>Inspect bolt for condition of locking lugs, pitted or chipped bolt face, and elongated firing pin hole.</p> <p>Inspect firing pin for wear and burrs.</p> <p>Inspect bolt carrier for cracks, burrs and chips.</p> <p>Check socket head cap screws for being staked.</p>

APPENDIX I

BASIC ISSUE ITEMS LIST

Section 1

1-1. PREFACE. This appendix list the basic issue items, tools, equipment and replacement parts for rifle, 5.56 mm, AR-18.

Section 2

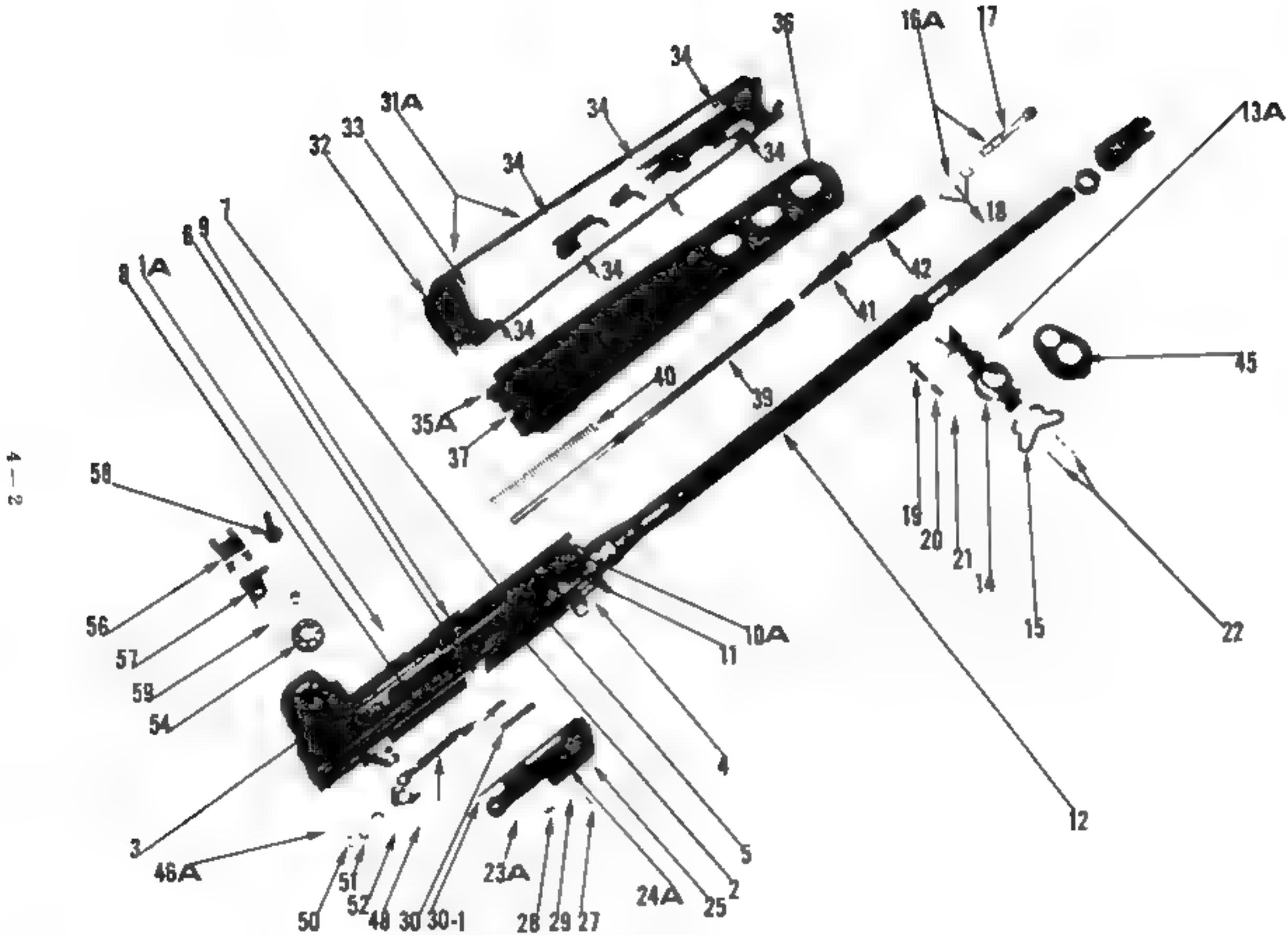
1-2. BASIC ISSUE ITEMS. The group listings are a breakdown of equipment by a physical description supported by illustrations.
(Figures 1-2-3 exploded views).

1-3. MAJOR ITEMS.

GROUP ASSEMBLY PARTS LIST

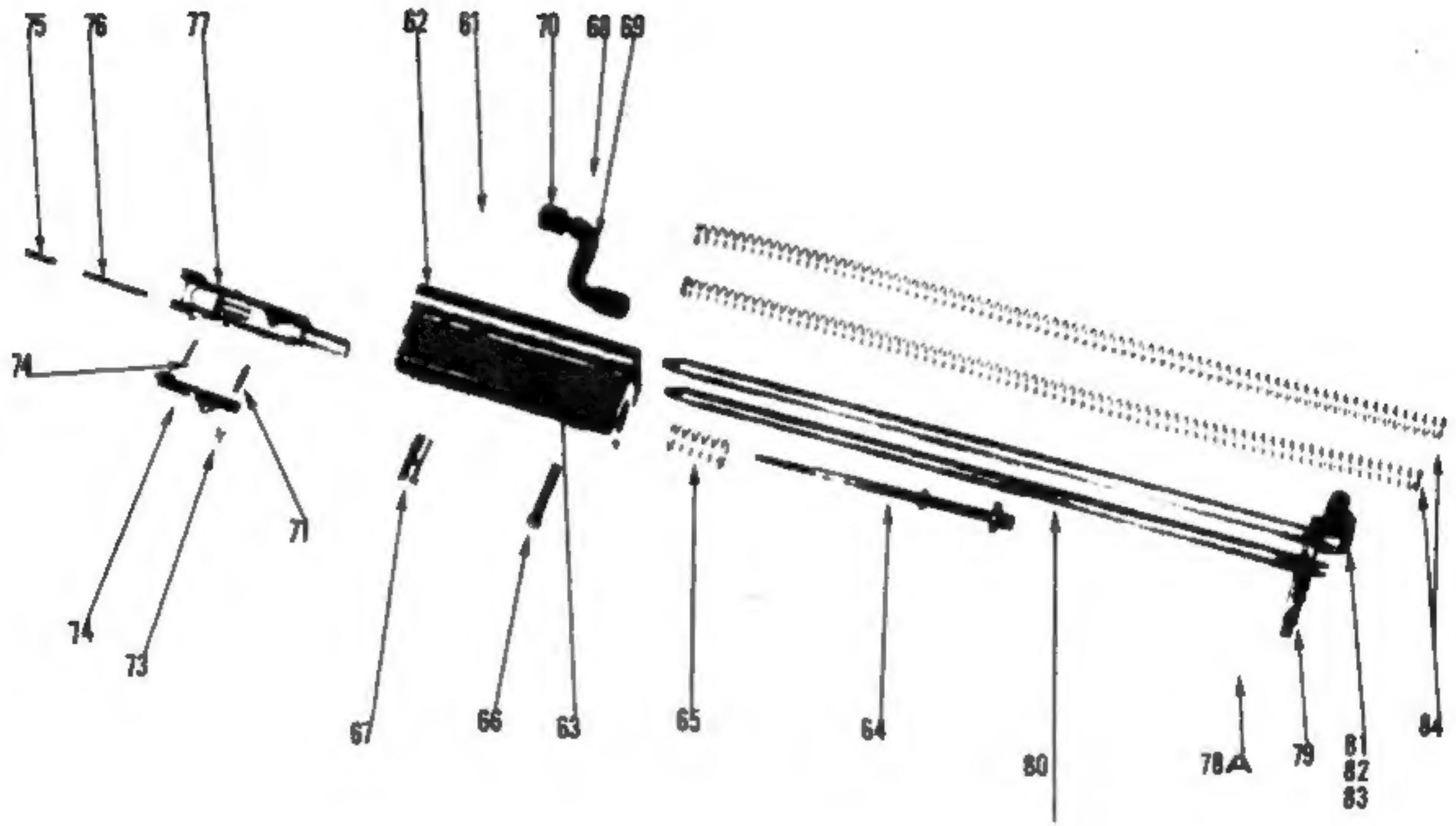
Figure No. Ref. No.	Manufacturer Stock No.	Description	Unit Quantity	Quantity Unit	10 Quantity	10-Day Maint. Allow Per 100 Equipment
						Unit Quantity
UPPER RECEIVER GROUP						
1A*	2638	Assy, Weld & Rivet, Upper Receiver				
2 "	2621	Receiver, Upper	1			
3 "	2650	Housing, Rear Sight	1			
4 "	2580	Extractor, Barrel	1			
5 "	2474	Guide Track, Upper Receiver	1			
6 "	2639	Rivet, Auto Seer	1	1		
7 "	2640	Log, Front, Dust Cover	1			
8 "	2641	Log, Rear, Dust Cover	1			
9 "	2786	Plate, Scope Mount	1			
10A	2679	Assy, Barrel To Upper Receiver	1			
11 "	2632	Upper Receiver Weld & Rivet Assy.	1	1		
12 "	2626	Barrel	1	1		
13A*	2654	Assy, Front Sight	1			
14 "	2634	Front Sight (Factory or Ordnance Installation Only)	1	1		(1.0)
15	2770	Swivel Sling, Front Sight	1	1		
16A	2657	Assy, Piston Front Sight	1			
17	2643	Piston, Front Sight	1	1		
18	2763	Ring, Piston	2	1		
19	2636	Blade, Front Sight	1	1		
20	2636	Plunger, Front Sight	1	1		
21	2677	Spring, Plunger, Front Sight	1	1		
22	2687	Taper Pin, Front Sight	2	2		
23A	2655	Assy, Dust Cover	1			
24A	2645	Weld Assy, Dust Cover	1	1		
25 "	2637	Cover, Dust	1			
26 "	2642	Cam Follower, Dust Cover	1			
27	2644	Spring, Plunger, Dust Cover	1	1		
28	2643	Plunger, Cam Follower, Dust Cover	1	1		
29	2780-1	Roll Pin	1	1		
30	2638	Spring, Hinge Pin, Dust Cover	1	1		

* Indicates part of an assy. not to be ordered separately.



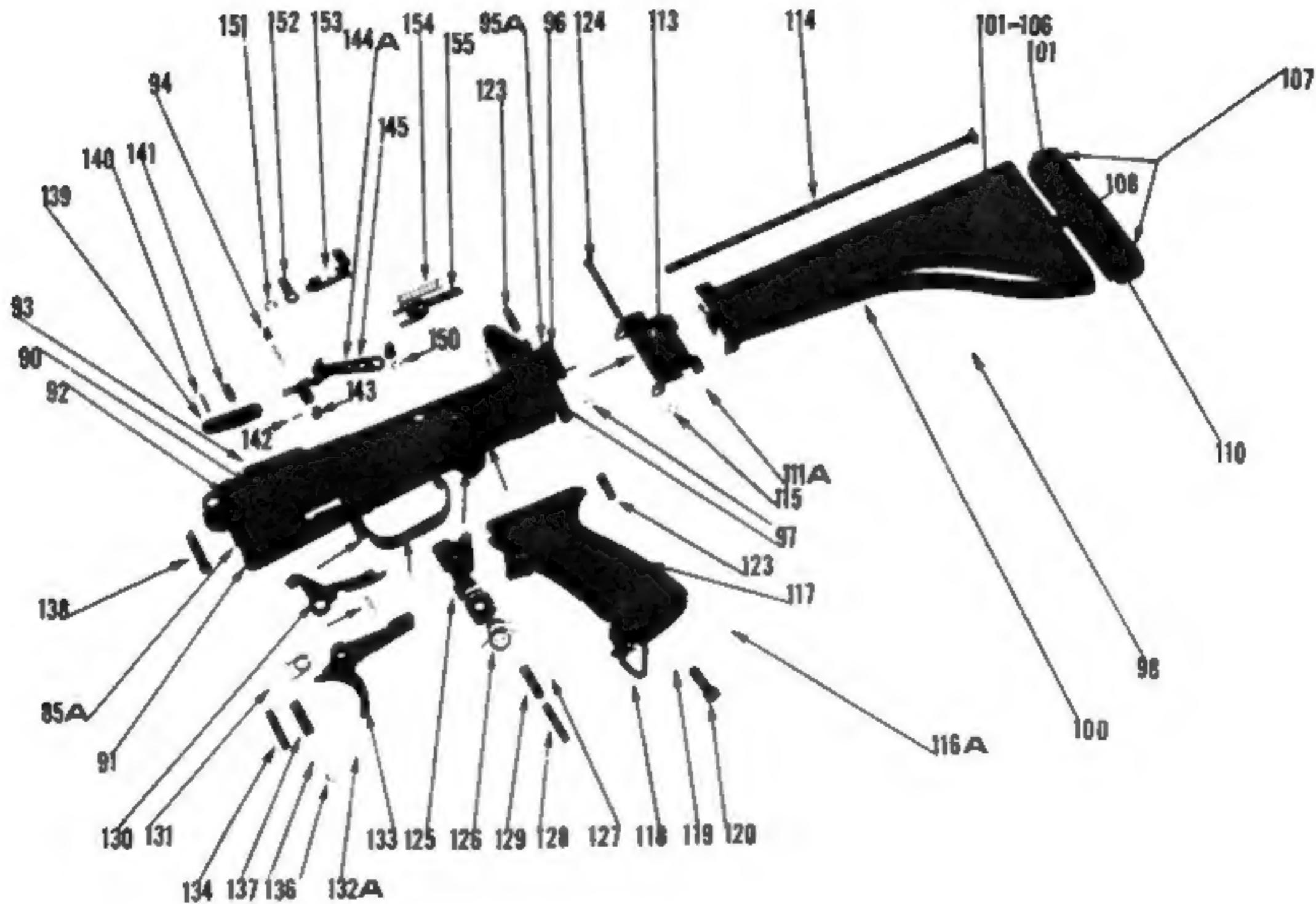
GROUP ASSEMBLY PARTS LIST

Part No.	Manufacturer Stock No.	Description	Unit QTY	Quantity Interpreted in Use	10-Day Maint. Allow Per 100 Equipment	
					Organization	Org. No.
30-1	2639	Hinge Pin, Dust Cover	1	1		
31A	2717	Assy, Upper Hand Guard	1	1		
32	2629	Hand Guard Upper	1	1		
33	2663	Liner, Upper Hand Guard	1	1		
34	2779	Drive Screw	8	8		
35A	2718	Assy, Lower Hand Guard	1	1		
36	2630	Hand Guard, Lower	1	1		
37	2664	Liner, Hand Guard, Upper	1	1		
38	2779	Drive Screw	4	4		
39	2641	Operating Rod	1	1		
40	2678	Spring, Operating Rod	1	1	(1.0)	
41	2639	Link, Operating Rod	1	1		
42	2642	Cylinder, Operating Rod	1	1		
43	2644	Nut, Recoil Compensator	1	1		
44	2775	Recoil, Compensator	1	1		
45	2644	Cap, Hand Guard	1	1		
46A	2708	Assy, Auto Sear				
47A	2784	Rivet Assy, Auto Sear				
48	2667	Sear, Automatic	1	1		
49	2664	Extension, Auto Sear	1	1		
50	2663	Pivot Pin, Sear Extension	1	1		
51	2664	Bushing, Auto Sear	1	1		
52	2676	Spring, Auto Sear	1	1		
53	2659	Pivot Pin, Auto Sear	2	1		
54	2664	Drum, Windage, Rear Sight	1	1		
55	2678	Spring, Rear Sight	1	1		
56	2643	Spring, Flat, Rear Sight	1	1		
57	2661	Aperature, Rear Sight	1	1		
58	2663	Screw, Windage Rear Sight	1	1		
59	2791	Protector, Rear Sight Screw	1	1		
60	2659-1	Snap Ring, Rear Sight	1	1		
BOLT GROUP						
61A	2705	Assy, Bolt Carrier	1	1		
62	2646	Carrier, Bolt	1	1		
63	2664	Pin, Press Fit, Bolt Carrier	1	1		
64	2671	Firing, Pin	1	1	(1.0)	
65	2715	Spring, Firing Pin	1	1	(1.0)	
66	2675	Take Down Pin, Bolt	1	1	(1.0)	
67	2690	Pin, Cam	1	1		
68A	2636	Assy, Charging Handle				
69	2694	Handle, Charging	1	1		
70	2635	Key, Charging Handle	1	1		
71	2667	Pin, Extractor	1	1	(1.0)	
72	2668	Spring, Extractor	1	1	(1.0)	
73	2666	Extractor	1	1		
74	2780-3	Roll Pin, Ejector	1	1		
75	2669	Ejector	1	1		
76	2670	Spring, Ejector	1	1		
77	2665		1	1		



GROUP ASSEMBLY PARTS LIST

Figure Index No.	Manufacturer Stock No.	Description	Unit of Issue	Quantity Incorporated in Unit	Organization	15-Day Maint. Allow Per 100 Equipment
78A	2662	Assy, Stake, Guide Rod	1	1		
79	2660	Forging, Plate, Guide Rods	1	1		
80	2661	Guide Rod	2	2		
81	2764	Plunger, Guide Rod Plate	1	1		
82	2765	Spring, Plunger, Guide Rod Plate	1	1		
83	2780-1	Roll Pin, Plunger, Guide Rod Plate	1	1		
84	2606	Spring, Action	2	2		
LOWER RECEIVER GROUP						
85A	2628	Assy, Weld & Rivet, Lower Receiver	1	1		
86	2687	Rivet, Trigger Guard	2	2		
87A	2858	Weld Assy, Trigger Guard	1	1		
88	2645	Trigger Guard	1	1		
89	2628	Nut, Pistol Grip	1	1		
90	2772-1	Post, Snap, Fastener	1	1		
91	2027	Receiver, Lower	1	1		
92	2782	Bracket, Lower Receiver	1	1		
93	2858	Bracket, Magazine Latch	1	1		
94	2604	Bushing, Bolt Catch	1	1		
95A	2753	Weld Assy, Bulkhead	1	1		
96	2744	Bulkhead, Receiver	1	1		
97	2746	Plate, Bulkhead	1	1		
98A	2708	Assy, Buttstock	1	1		
99A	2859	Assy, Fastener, Buttstock	1	1		
100	2614	Buttstock	1	1		
101	2772-2	RC 5133-18	Cover, Snap Fastener	1		
102	2772-5	Spacer, Snap Fastener	8			
103	2772-4	Spring, Snap Fastener	2			
104	2772-3	Plate, Snap Fastener	1			
105	2772-6	Rivet, Snap Fastener	4			
106	2852-1	Washer, Plain, Snap Fastener	4			
107A	2860	Assy, Buttcap	1			
108	2618	Buttcap	1			
109	2621	Recoil Pad	1			
110	2774	Screw, Recoil Pad	2	2		
111A	2752	Weld Assy, Hinge, Buttstock	1			
112	2760	Hinge, Buttstock	1			
113	2764	Nut, Buttstock Hinge	1			
114	2620	Screw, Buttstock	1	1		
115	2654-1	Snap Ring, Hinge Pin, Stock	1	1		
116A	2861	RC 5133-15	Assy, Pistol Grip	1		
117	2617	Pistol Grip	1			
118	2696	Sling, Swivel, Pistol Grip	1			
119	2723	Washer, Plain, Pistol Grip	1	1		
120	2622	Bolt, Pistol Grip	1	1		
121	2780-3	094-0562	Roll Pin, Plunger, Bulkhead	2	2	
122	2672	Spring, Plunger, Bulkhead	1	1		
123	2761	Plunger, Bulkhead	2	2		
124	2586	Hinge Pin	1	1		
125	2609	Hammer	1	1		
126	2653	Spring, Hammer	1	1		



GROUP ASSEMBLY PARTS LIST

Index No. Figure	Manufacturer Stock No.	Description	Unit of Issue	Quantity Incorporated in Unit	Organization	15-Day Maint. Allow Per 100 Equipment
127	2651	Snap Ring, Hammer, Trigger	2	2		
128	2650	Pin, Hammer, Trigger	2	2		
129	2610	Bushing, Hammer	1	1		
130	2607	Disconnect, Trigger	1	1		
131	2695	Spring, Disconnect	1	1		
132A	2712	Asy, Riveted, Trigger		1		
133	2647	Trigger	1			
134	2608	Asy Pin, Trigger	1			
135	2652	Spring, Trigger	1	1		
136	2694	Spacer, Trigger	1	1		
137	2648	Bushing, Trigger	1	1		
138	2781	Takedown Pin, U & L Receivers	1	1		
139	2657	Latch, Magazine	1	1		
140	2780-4	Roll Pin, Magazine Latch	1	1		
141	2702	Spring, Magazine Latch	1	1		
142	2780-3	Roll Pin, Bolt Catch	1	1		
143	2608	Retainer, Spring, Bolt Catch	1	1		
144A	2601	Weld Asy, Bolt Catch		1		
145	2597	Bolt Catch	1			
146	2598	Housing, Plunger, Bolt Catch	1			
147	2602	Spring, Plunger, Bolt Catch	1	1		
148	2600	Plunger, Bolt Catch	1	1		
149	2606	Pin, Bolt Catch	1	1		
150	2854-4	Snap Ring, Bolt Catch	1	1		
151	2854-1	Snap Ring, Safety Lever	1	1		
152	2766	Lever, Safety	1	1		
153	2595	Casting, Safety	1	1		
154	2701	Spring, Safety Detent	1	1		
155	2596	Detent, Safety	1	1		
ACCESSORIES						
166	2668	Magazine Asy, 20-round				(4.0)
166	2662	Bayonet-Knife, AR-18				
169	2863	Scabbard, Bayonet-Knife, AR-18				
160	2773-5	Bipod, AR-18				
161	2864	Case, Bipod, AR-18				
162	2865	Scope, 2.75 x 20mm with mount, AR-18				
163	2866	Cleaning Rod, AR-18				
164	2867	Bore Brush, Caliber. 22				
165	2868	Sling, AR-18				(2.0)